

Building near Council's Sewer Main

Building near Council's Sewer Main: Zone of influence.

Zone of Influence refers to the area either side of the buried pipe where a structure* may transmit a load to the pipe. Extent of the zone of the influence depends on the nature of the ground in which the structure is located and the depth# of the sewer main and is shown in the figures 1 & 2 (see right):

Armidale Regional Council's approach to building any structure near a sewer main is as follows in order of preference:

1. All structures are to be built outside the easement;

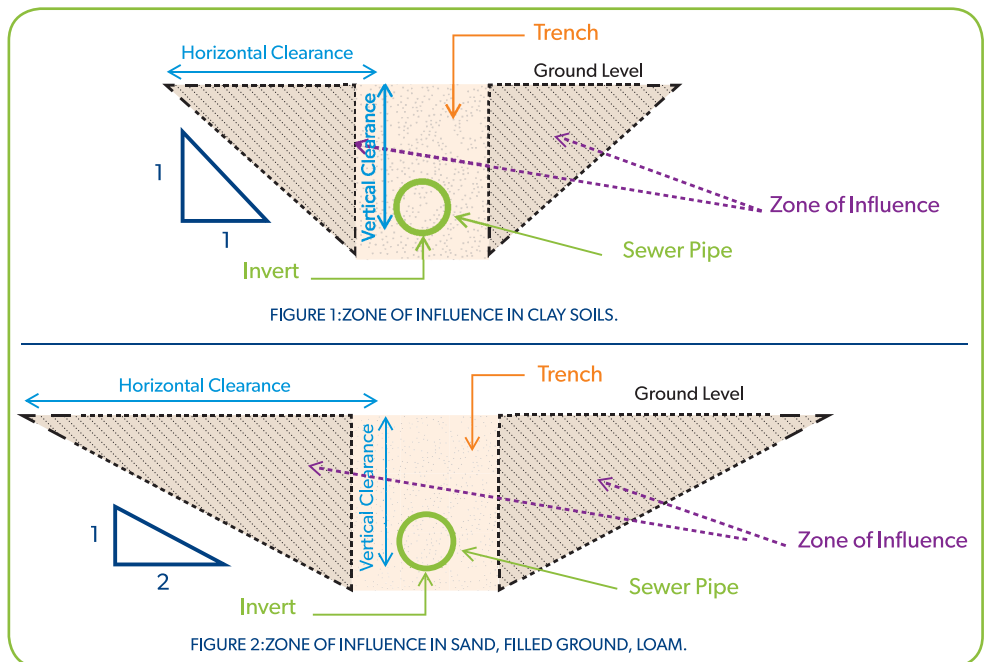
Where no easement is registered:

2. Locate the proposed structure so that its footings are outside the sewer's zone of influence;
3. Relocate Council's Sewer so that it is out side the zone of influence of proposed structure;
4. Allow sewer within zone of influence of proposed structure but maintaining minimum clearances and subject to additional protection measures;
5. Building over sewer in an exceptional circumstance and subject to a number of conditions.

For preference 2 above:

- 2.1 For clay soils (figure 1) the zone of influence will be based on a 1:1 ratio. For example, if the invert (bottom) of the sewer pipe is 1m below ground (vertical clearance), the footings of the structure must be at least 1m away from sewer pipe (horizontal clearance);
- 2.2 For sand, filled ground and loam soils (figure 2) the zone of influence will be based on a 1:2 ratio. For example, if the invert (bottom) of the sewer pipe is 1m below ground (vertical clearance), the footings of the structure must be at least 2m away from the sewer pipe (horizontal clearance).

If preferences 1, 2 and 3 above are not practical, preference 4 will allow for structures to be built within the zone of influence subject to BOTH the following conditions:



- 4.1 Minimum horizontal clearance of 1.5m is provided. The clearance is measured from the outer wall of a footing/structure (whichever closer) to the outer wall of sewer pipe or outer-wall of maintenance structure; and
- 4.2 Structure footings are extended below the Zone of Influence as defined in the figure 1 or figure 2, i.e. greater than the vertical clearance depth.

Minor structures such as fencing, retaining walls less than 1m deep, and driveways may be allowed over the sewer without additional protection measures subject to availability of a minimum cover of 750mm.

Construction of a retaining wall across the sewer may be permitted under exceptional circumstances when the sewer must be protected by structurally designed bridging over the sewer which has been certified by a practicing degree qualified structural engineer.

- * Structures include but are not limited to new residential/commercial/industrial buildings and minor/major extensions, car ports and garages, swimming pools, retaining walls and sheds, concrete driveways and roads, light and power poles, surface pad footings and concrete slabs.
- * Please contact Council to confirm a specific depth (vertical clearance) of the sewer main in question.